# Enhancing Community-based Aquatic Monitoring: February 2011 Workshop

Collaborative Workshop held February 14 – 15, 2011
Genesis Boardroom, Yellowknife

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*Taking Northern Science to the Streets*

May 4, 2011

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## INTRODUCTION

### Workshop Goal

*Build a foundation of mutual trust, understanding and communication on which to build better aquatic resource monitoring programs that make the best use of government expertise and community-based knowledge.*

### Participants

Participants included key Métis and government partners actively involved in aquatic resource monitoring in the NWT:

- North Slave Métis Alliance
- NWT Métis Association
- Environment Canada
- Fisheries and Oceans Canada
- Indian and North Affairs Canada
- Environment and Natural Resources, GNWT

Métis representatives included community program administrators, resource managers, leaders, and elders.

*This is a long ladder to climb and we haven't even grabbed the bottom rung yet.*
Wayne Laginhand, North Slave Métis Alliance

## WORKSHOP HIGHLIGHTS

### Workshop Objectives

Participants began by brainstorming their own objectives for the workshop in terms of how it could contribute to aquatic monitoring in four main areas:

1. *Understand* the process, programs, issues and opportunities related to aquatic monitoring.

2. *Influence* the development of NWT water standards and the management of both transboundary and local water issues.

3. *Improve* communication, collaboration, and connections among aquatic monitoring groups and decision-makers.

4. *Address* regulatory and legal gaps and weaknesses related to aquatic monitoring.

## Aquatic Resource Issues

Workshop participants identified key concerns that should be addressed by aquatic resource monitoring.

***Monitoring issues***

- Lack of consistent, long-term funding for monitoring staff and projects
- Lack of independent monitoring of industry activities
- Ineffective monitoring of impacts from Alberta tar sands
- Poor connection between water & air monitoring (e.g. incineration impacts)
- Need better monitoring of sewage lagoons
- Poor communication among government departments
- Lack of "bridges" from communities to southern decision-makers
- Lack of shared information portal for data storage, retrieval and analysis
- Too many studies, too little action
- Communities should take lead on identifying monitoring priorities
- Little communication among communities related to monitoring

***Water quality and quantity issues***

- Toxins from pulp mills, farms, dams all flow into Slave River & Great Slave Lake
- Decline in Great Slave Lake water quality from increased boats and sewage
- General decline in water levels creates winter travel hazards
- Overflow of Hay River sewage lagoon

***Fish and wildlife issues***

- Decrease in number of inconnu since construction of Taltson dam
- Deformed fish (e.g. two eyes on the same side of the head) and open sores
- Taltson river floods beaver dams and muskrat lodges

***Regulatory and legal issues***

- Lack of distinct northern water standards that reflect pollution from the south
- Slow progress on devolving water management responsibilities
- Canada's mining laws and regulations give inadequate protection to water

*At the very least, communities should be able to create a baseline inventory of their local hot spots.*
Arthur Beck, NWT Métis Nation

## PROGRAMS AND PARTNERS

### Water Stewardship Strategy – Loretta Ransom

The NWT Water Stewardship Strategy (WSS) is a made-in-the-North plan that will guide the long-term stewardship of water resources in the NWT. This Strategy was developed collaboratively by the Government of the Northwest Territories, Indian and Northern Affairs Canada, designated representatives of Aboriginal governments and with significant input from

NWT communities. Governments reponsible for implementing this "living" Strategy have assured communities that they will have continued input as it is refined and implemented.

After an update on the WSS, participants discussed monitoring priorities that they hoped it could address including:

- Monitoring water and sediment levels on the Slave and Mackenzie Rivers
- Better communication with academic researchers on what and where to sample
- Increased input from communities on monitoring priorities and indicators
- Building connections between WSS and the NWT Protected Areas Strategy, starting with the Slave River as a pilot study
- Supporting ongoing aquatic research by Pamela Taylor and Marlene Evans.

## Environmental Damages Fund – Leslie Wilson

The Environmental Damages Fund (EDF) is a creative, special purpose fund, administered by Environment Canada, which provides a way to stir money received as a result of environmental fines and court orders back into projects that benefit the environment. It is based on the "Polluter Pays" principle that makes those who cause environmental damage or harm to wildlife take responsibility for their actions. Priority funding is given to projects that restore the environment and conserve wildlife in the region where the original damage occurred.

The call for proposals closes December 1st and successful projects begin April 1st. To be eligible, projects must address one or more of these categories:

- Restoration (highest priority)
- Environmental Quality Improvement
- Research and Development
- Education and Awareness

Discussion focused on the need to include transboundary impacts in the the award of funds, for instance, fines levied for upstream impacts should be available for beneficial projects downstream in other jurisdictions. Other comments suggested that lots of monitoring has happened; now it's time to act. As well, participants emphasized the need to give higher priority to Traditional Knowledge when reviewing EDF proposals.

*Communities need a much bigger voice in dealing with trans-boundary water issues since we're the ones who feel it first.*
Ray Jones, North Slave Métis Alliance

## Northern Contaminants Program – Lorna Skinner

The Northern Contaminants Program (NCP) started in 1991 because of elevated contaminant levels in our fish and wildlife, such as fish, caribou and marine mammals. The program provides funding support for community-based monitoring aimed at understanding northern ecosystems and how they are changing. Successful proposals – called for every November – usually include a good balance of capacity building, community consultation, and blending of scientific and traditional knowledge.

To be eligible, projects must address one or more of these categories:

- Human health
- Environmental monitoring and research
- Community based monitoring
- Communication, capacity and outreach

Over the past year, NCP received 6 proposals related to community based monitoring. January 24th is the deadline for proposal submissions in this category.

Concerns were expressed that most NCP funds go to Nunavut and not, for instance, to the Slave River. This largely reflects where proposals are coming from, not a geographic bias inherent in the NCP funding process. Participants were encouraged to become more familiar with the program and submit their own proposals.

*It takes science ten years to answer these questions. An elder can tell you in ten days. We've got to bring them together.*
Chris Heron, NWT Métis Nation

## Cumulative Impacts Monitoring Program (CIMP) – Deanna Leonard

The CIMP program aims at providing advice to decision-makers on managing or mitigating cumulative impacts. It applies to the whole NWT and provides funding for monitoring, research, capacity-building, and training. The most successful projects often have a strong TK component and build lasting partnerships between communities and government. The program's specific objectives include:

- Identify and monitor uses of land and water, and sources of cumulative impacts
- Identify and fill priority monitoring gaps
- Report on trends in environmental quality
- Provide information to co-management bodies and government (e.g., land use planning, research, environmental assessment, regulation and enforcement)
- Build local capacity to better contribute to environmental monitoring

The need for CIMP to collaborate more with other monitoring initiatives in the NWT has emerged as a top program priority. Other trends include developing more standardized monitoring protocols, and making user-friendly tools available to communities, for instance Aurora College's interactive map and a one-stop monitoring "portal" for information.

Discussion focused on the issue that at least half of the CIMP funding was awarded to government and academic researchers and not enough to help build community capacity. Where communities are involved, there is a common perception that government takes a lead role in identifying issues and monitoring priorities while communities are simply "tacked on" as partners. It was noted also that proposal deadlines for this and other monitoring programs were "all over the map" and that these should be better coordinated to ensure multiyear funding and provide more stable employment.

*We need to join the dots between communities, sampling protocols, baseline monitoring, and decision-making.*
Deanna Leonard, DFO

## Aboriginal Aquatic Resources and Oceans Management (AAROM) and Aboriginal Fishery Strategy (AFS) – Deanna Leonard

The Aboriginal Fishery Strategy helps aboriginal people in unsettled land claim areas to manage their fisheries for food and cultural purposes. AAROM is an offshoot of AFS and has a wider monitoring focus including fish, water quality and other ecosystem factors. It is meant to build local technical capacity, strengthen monitoring partnerships, promote information exchange, and establish structures that enhance local involvement in decision-making. Both programs offer funding for such things as monitoring equipment, boats and motors, training and youth camps as well as in-kind technical support.

Participants stated that proposal writing and reporting requirements for these programs are a huge burden and need to be simplified. Even once all requirements are met, dollars are often slow to reach to communities. A more integrated, streamlined process would free up significant resources, people, and time. Development of long-term, community-specific monitoring plans could also help this process.

## Ecology North – Christine Wenman

Ecology North is a charitable, non-profit organization based in Yellowknife to support sound environmental decision-making on an individual, community and regional level. Its programs focus on three priorities: public education and awareness, climate change, and sustainable living.

Ecology North recently hosted a one-day workshop on building stronger links between environmental monitoring and education. This would not only enhance public awareness of monitoring issues but also help build capacity for communities to take charge of their own monitoring work.

Good examples of this link between education and monitoring are the GNWT's Forestry Management Division, which is developing monitoring indicators appropriate for communities through its education programs, and the grade 10 to 12 Experiential Science curriculum which covers monitoring in its lesson plans.

*When it comes to monitoring, we can't hire local people with the credentials to do our work on our land.*
Sheryl Grieve, North Slave Métis Alliance

## Obstacles, Solutions, and Specific Actions for Improved Monitoring

Workshop participants made recommendations through a three-step brainstorming process, moving from obstacles to solutions and then on to specific actions that should be taken to improve community-based monitoring.

**Obstacles**

- ***Capacity and Training***
  - High staff turnover creates "brain drain" from community and organizations
  - Government departments not talking to each other
  - Communities lack capacity to influence monitoring policies
  - Insufficient training and education opportunities
  - Difficult to get organized when already so busy
  - Proposal writing process is disconnected from one program to the next

- ***Planning***
  - Disconnect between local, regional & federal planning priorities
  - No long-term planning at any level
  - Communities have not spelled out monitoring priorities
  - Government not communities, taking lead; should be other way around

- ***Coordination***
  - Coordination at trans-boundary level is weak
  - Permitting and land administration processes are fragmented
  - Duplication of efforts
  - Lack of interdepartmental coordination and ownership (working in "silos")
  -

- ***Communication and information sharing***
  - Little communication, reporting, or feedback from universities
  - Poor link between traditional knowledge and conventional science
  - Poor internet capability and data access in some communities
  - Difficult to access government experts and funding

- ***Funding***
  - Slow government process out of synch with seasons
  - Lack of phased, multi-year funding
  - Lack of continuity from year to year or program to program
  - Few opportunities for long-term employment

**Solutions**

- ***Capacity and Training***
  - Explore options for cultivating and retaining trained monitoring staff through retention bonuses, forgivable education loans, and staff housing.
  - Establish consistent monitoring positions in land use bodies.

- ***Planning***
  - Link watershed protection with the Water Strategy and Protected Area Strategy.
  - Hold regional workshops to address shared monitoring issues & opportunities.
  - Communities should do needs assessments to identify priorities and gaps.
  - Integrate community priorities into government work plans.

- ***Coordination***
  - Create a "one-window" government funding committee that could receive a simple Letter of Intent from communities and, in turn, shunt their projects to the appropriate funding sources ("match-maker" role) as is now done for the Canadian Northern Economic Development Agency or CANNOR.
  - Develop formal commitments & MOUs among monitoring departments to improve collaboration.
  - Promote interdepartmental coordination in developing monitoring work plans.
  - Standardize timelines for proposals.
  - Create one process for multiple programs.
  - Move to a more planning-based, proactive relationship with industry rather than reacting on a project-by-project basis.
  - Monitoring programs could pool funds to help create long-term community-based monitoring positions.

- ***Communication and information sharing***
  - Increase networking & sharing among communities and agencies of "what works".
  - Introduce accountability measures for government departments.
  - Establish a widely accessible "portal" for communities to store & share data, reports.
  - Develop data sharing and reporting agreements with universities.
  - Develop a NWT-wide "who's who" chart of aquatic resource monitoring contacts.

- ***Funding***
  - Explore options for core funding and matching funding.
  - Government should support communities in developing their own long-term work plans and budgets.
  - For development projects, provide intervener funding earmarked for monitoring.

**Specific Actions**

- ***CIMP***
  - Return to CIMP's original community focus.
  - Allocate funding for long-term community-based monitoring.
  - Help coordinate funding for all monitoring programs in the NWT.
  - Explore options for adapting a Multiproject Environmental Agency (MPEA) model to community monitoring to improve coordination and build capacity.
  - Initiate the preparation of an MOU among monitoring departments.

- ***Northern Contaminants Program***
  - Take the lead on organizing a meeting of program funding people to explore the possibility of establishing a one-window "match-maker" committee triggered by a Letter of Intent to help connect communities to the most appropriate funding partner.

*A letter of intent instead of doing a whole proposal is a Godsend. I see it as simplifying the whole process.*
Earl Jacobson, NWT Métis Nation

## Appendix – Workshop Participants

**North Slave Métis Alliance**
- Wayne Laginhand
- Ed Jones
- Ray Jones
- Audrey Enge
- Bob Mercredi
- Sheryl Grieve

**NWT Métis Nation**
- Paul Harrington
- Sunny Ashcroft
- Earl Jacobson
- Al Heron
- Arthur Beck
- Chris Heron

**Ecology North**
- Christine Wenman

**Environment Canada**
- Leslie Wilson

**Indian and Northern Affairs Canada**
- Lorna Skinner

**Department of Fisheries and Oceans**
- Trevor Sinclair
- Lorraine Sawdon
- Deanna Leonards

**Environment and Natural Resources**
- Loretta Ransom
- Aiyann Lajeunesse

**Cygnus Environmental**
- Jamie Bastedo (Facilitator)